

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S7	11	S6 and frame	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/26 08:27
S8	5	S6 and flatness	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/26 08:28
S9	4	S6 and squared	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/26 08:28
S10	19	S6 and (average or mean)	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/26 08:28
S12	4	S9 and S10	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/26 08:29
S13	1	S12 and S8	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/26 08:30
S14	2	S6 and echo and (voice or speech) and (frequency adj spectr\$5)	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/26 08:32
S15	107584	(speech or voice) with (detect\$7 or recogni\$7)	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/26 08:33
S16	111212	frequency with spectr\$5	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/26 08:33
S17	15320	frequency with spectr\$5 with power	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/26 08:34
S18	300	bandpass with frame with filter	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/26 08:34

## EAST Search History

S19	887	(bandpass with filter) same frame	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/26 08:35
S20	1169	S15 and S17	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/26 08:35
S21	18	S20 and S19	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/26 13:18
S22	1154	squared with difference with (average or mean)	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/26 08:36
S23	1	S21 and S22	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/26 08:36
S24	0	S21 and suppress\$7 and echo and (square same difference\$4 same (average or mean))	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/26 09:20
S25	2	S21 and (square same difference\$4 same (average or mean))	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/26 08:52
S27	35	square\$4 same (difference or subtract\$5) same (sum or summat\$6 or add\$4 or addition) same spectr\$4 same (mean or average) same maxim\$4	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/26 11:17
S28	10	S27 and audio	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/26 09:23
S29	36	square\$4 same (difference or subtract\$5) same (sum or summat\$6 or add\$4 or addition) same spectr\$4 same (mean or average) same (maxim\$4 or greatest or largest or biggest)	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/26 11:20
S30	18	square\$4 with (difference or subtract\$5) with (sum or summat\$6 or add\$4 or addition) same spectr\$4 same (mean or average) same (maxim\$4 or greatest or largest or biggest)	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/26 11:42

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S31	32	squar\$4 with (difference or subtract\$5) with (sum or summat\$6 or add\$4 or addition) with spectr\$4 with (mean or average)	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/26 11:55
S32	172	(difference or subtract\$5) with (sum or summat\$6 or add\$4 or addition) with spectr\$4 with (mean or average)	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/26 13:47
S33	127	S32 and (maxi\$5 or greatest or largest)	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/26 12:18
S34	49	S32 and (maxi\$5 or greatest or largest) near2 (value or variable or difference or amount)	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/26 12:19
S35	49	S32 and ((maxi\$5 or greatest or largest) near2 (value or variable or difference or amount))	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/26 12:19
S36	3	S21 and echo and (decod\$6 or encod\$6)	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/26 13:19
S37	118	S32 and maxim\$6	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/26 13:48
S38	18	S32 and (maxim\$6 near2 difference)	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/26 13:52
S39	4	S32 and (maxim\$6 near1 difference)	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/26 13:56
S40	94	maxim\$5 with (average or mean) with difference\$3 with spectr\$4	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/26 14:01
S41	10	maxim\$5 with (average or mean) with difference\$3 with spectr\$4 with (audio or voice or noise)	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/26 14:15
S42	66	(maximum adj difference) with spectr\$4	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/26 14:16
S43	1	(US-4630304-\$).did.	USPAT	OR	OFF	2007/06/26 14:54

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S44	1	S43 and bandpass and power	USPAT	OR	OFF	2007/06/26 14:55
S45	10	((maxim\$4 or greatest or largest) adj (distance or difference)) same spectr\$3 same frequency same (average or mean)	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/27 07:38
S46	42771	((maxim\$4 or greatest or largest) adj (distance or difference))	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/27 07:39
S47	11836	("704").CLAS.	USPAT; USOCR	OR	OFF	2007/06/27 07:38
S48	110	S46 and S47	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/27 07:38
S49	438	((maxim\$4 or greatest or largest) adj (distance or difference)) same spectr\$3	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/27 07:39
S50	3	S47 and S49	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/27 08:46
S51	23476	(("sum of the" adj difference\$2) or ("sum of" difference\$2)) same (maxim\$4 adj (value or amplitude or energy))	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/27 10:15
S52	13990	(("sum of the" adj difference\$2) or ("sum of" difference\$2)) with (maxim\$4 adj (value or amplitude or energy))	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/27 08:49
S53	75	S52 and S47	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/27 08:49
S54	0	((sum adj of adj the adj difference\$2) or (sum adj of adj difference\$2)) with (maxim\$4 adj (value or amplitude or energy))	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/27 08:51
S55	0	((sum adj of adj the adj difference\$2) or (sum adj of adj difference\$2)) same (maxim\$4 adj (value or amplitude or energy))	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/27 08:50
S56	0	((sum adj of adj the adj difference\$2) or (sum adj of adj difference\$2))	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/27 08:51

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S57	0	sum adj of adj the adj difference\$2	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/27 08:51
S58	228	(sum near3 difference\$2) with (maxim\$4 adj (value or amplitude or energy))	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/27 08:52
S59	0	S58 and S47	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/27 08:52
S60	0	"sum of the difference"	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/27 08:53
S61	0	sum adj of adj the adj difference	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/27 08:53
S62	0	sum near 2difference	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/27 08:53
S63	23468	sum near2 difference	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/27 09:23
S64	183	S63 and S47	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/27 08:57
S65	99	S64 and spectr\$3 and maxim\$4	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/27 08:58
S66	19	S64 and (spectr\$3 with maxim\$4)	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/27 08:58
S67	7	S64 and (spectr\$3 with maxim\$4 with frequency)	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/27 09:24
S68	3507	sum near2 square\$2 near1 difference	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/27 09:23

## EAST Search History

S69	73	S68 and S47	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/27 09:23
S70	1	S69 and (spectr\$3 with maxim\$4 with frequency)	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/27 09:54
S71	1	S69 and (spectr\$3 with maxim\$4 with amplitude)	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/27 09:31
S72	5	S69 and (spectr\$3 with maxim\$4)	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/27 09:31
S73	0	S69 and (spectr\$3 with maxim\$4 with frequency with difference)	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/27 09:54
S74	2	S68 and (spectr\$3 with maxim\$4 with frequency with difference)	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/27 09:57
S75	10	S68 and (spectr\$3 with maxim\$4 with difference)	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/27 10:07
S76	14349	((maxim\$3 or largest or greatest) adj value) with ((maxim\$3 or largest or greatest) with difference)	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/27 10:09
S77	73	S76 and S47	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/27 10:08
S78	236	((maxim\$3 or largest or greatest) adj value) with ((maxim\$3 or largest or greatest) adj difference)	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/27 10:09
S79	1	S78 and S47	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/27 10:09
S80	7	(US-5774849-\$ or US-6862567-\$ or US-5666466-\$ or US-5479522-\$ or US-6999520-\$ or US-5189701-\$ or US-RE36683-\$).did.	USPAT	OR	OFF	2007/06/27 10:15

## EAST Search History

S81	255	(average or mean) with spectral with normaliz\$5	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/27 10:16
S82	0	S80 and S81	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/27 10:16
S83	19105	(average or mean) and spectral and normaliz\$5	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/27 10:16
S84	3	S80 and S83	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/27 10:16
S85	3792	(average or mean) and (spectral same normaliz\$5)	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/27 10:16
S86	2	S80 and S85	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/27 10:18
S87	302	(average or mean) same spectr\$3 same normaliz\$7 same (divis\$6 or divid\$6)	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/27 10:20
S88	36	S87 and S47	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/27 10:19
S89	108	spectr\$3 same normaliz\$7 same ((divis\$6 or divid\$6) near4 (average or mean))	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/27 10:20
S90	9	S89 and S47	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/27 10:34
S91	25344	count\$4 near3 (amplitude\$4 or power or energy)	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/27 10:37
S92	124	S91 and S47	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/27 10:37

## EAST Search History

S93	82	S92 and threshold	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/27 10:37
S94	838	count\$4 near3 (amplitude\$4 or power or energy) with threshold	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/27 10:48
S95	23	S94 and S47	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/27 10:47
S96	46	count\$4 near3 (amplitude\$4 or power or energy) with threshold with (greatest or maxim\$4 or largest)	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/27 10:48
S97	104	encod\$4 with transmi\$8 with (voice or speech) with noise with (flag\$4 or trigger\$3 or detect\$4)	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/28 07:28
S99	74	S97 and ((speech or voice) with (detect\$7 or recogni\$7)) and frequency	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/27 13:21
S100	18	S99 and threshold and spectr\$3 and ((energy or power) with (level\$3 or smooth\$5 or flat\$7))	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/27 13:24
S101	0	dunling-li.in.	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/27 16:04
S102	22	li-dunling.in.	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2007/06/27 16:04
S103	1374	(suppress\$6 with noise) and (bandpass with filter) and (frequency same spectr\$4)	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/28 10:43
S104	11836	("704").CLAS.	USPAT; USOCR	OR	OFF	2007/06/28 10:42
S105	66	S103 and S104	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/28 10:44

## EAST Search History

S10 6	251	(suppress\$6 with noise) and (suppress\$6 with ratio) and (bandpass with filter) and (frequency same spectr\$4)	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/28 12:29
S10 7	19	S106 and S104	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/28 10:44
S10 8	74	(suppress\$6 with noise) and (suppress\$6 with ratio) and (bandpass with filter) and (frequency same spectr\$4) and decod\$4	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/28 13:41
S10 9	1	S108 and S104	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/28 12:46
S11 0	1	S109 and (output same decod\$4)	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/28 12:46
S11 1	23	(suppress\$6 with noise) and (suppress\$6 with ratio) and (echo same output) and (frequency same spectr\$4) and decod\$4 and feedback	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2007/06/28 13:44